

phase domain

Region of a material that is uniform in chemical composition and physical state.

Notes:

1. A phase in a multiphase material can form domains differing in size.
2. The term 'domain' may be qualified by the adjective microscopic or nanoscopic or the prefix micro- or nano- according to the size of the linear dimensions of the domain.
3. The prefixes micro-, and nano- are frequently incorrectly used to qualify the term 'phase' instead of the term 'domain'; hence, 'microphase domain', and 'nanophase domain' are often used. The correct terminology that should be used is phase microdomain and phase nanodomain.

Source:

PAC, 2004, 76, 1985 (*Definition of terms related to polymer blends, composites, and multiphase polymeric materials (IUPAC Recommendations 2004)*) on page 2001